

## SPECIAL NOTE

### *Sarracenia rubra* ssp. *Jonesii* Named to Endangered Status Under U.S. Endangered Species Act

By Donald Schnell (Rt. 1, Box 145C, Pulaski, VA 24301)

On 30 September 1989, *Sarracenia rubra* ssp. *jonesii* was officially determined as endangered and added to the Endangered Species Act (1973) listing under the nomenclature above. (See: Federal Register, vol. 53, No. 190, pp. 38470-38474).

The Federal Register article written by Fish and Wildlife personnel of the US Dept. of the Interior is detailed and interesting reading. There is some discussion of the taxonomic difficulties aired over many years and the reason for selecting subspecies status (even though CITES listed the same populations as a species *Sarracenia jonesii* in 1981). There then follows a description of the plant and its habitat. Although 26 populations have been reported historically, only ten are extant, 4 in North Carolina in two mountain counties, and six in South Carolina. Only two of these ten populations are on public and thereby protectable land, and these are in South Carolina. There is some fear that recreational use and traffic on these public areas may actually endanger the small populations still further. The remaining populations are on private lands with no absolute protection other than state laws of limited extent and enforceability. These ten populations are quite small, one no more than 50 square feet. Current threats involve water table changes, change of land use, forest and brush overgrowth, and private and commercial collection. While this author has generally held that habitat destruction is the major consideration of threat to CP in general, I recognize that very small, limited populations are quite susceptible to irresponsible collector damage, especially massive commercial collections for certain European dealers. At this point, this taxon is not on the market.

The author of the Federal Register article concluded that eutrophication of sites proceeds so slowly that it is not an immediate factor. I would disagree with this. I have seen a very fine seep bog in piedmont North Carolina containing masses of *S. flava* and *S. purpurea* ssp. *venosa* along with hybrids go from an open, healthy area with a small central pond to wet brush and woods with only a few etiolated pitcher plants struggling on in less than 20 years. One of the better locations for ssp. *jonesii* in Henderson County, NC has gone from a beautiful, "healthy" active site to one severely threatened by brush and tree overgrowth shading in less than ten years. Part of the latter problem is an apparently misdirected attempt to protect the area from pasturing cows by fencing it off. Now the cattle do not keep down the weeds by feeding and trampling on them (They never consumed the pitcher plants and trampling on shallow rhizomes seemed to induce vegetative propagation).

As I have mentioned many times, I believe we must go to the private sector, particularly the Nature Conservancy, to seek some relief in these private land holdings. If the owners refuse outright sale or donation, they might agree to a preservation easement allowing designated and limited agents in to properly supervise and steward the site. While Nature Conservancy and some other conservation group consortiums do a fine job of acquisition, they prefer to turn the land over to a local, state or federal agency for stewardship as soon as possible. This is fine as long as the agency is able to wisely and informatively choose knowledgeable individuals to appropriately manage the sites. A local university professor—no disrespect intended—or agency biologists may not be those persons in spite of "credentials".

As an example of the latter, a recently preserved site for *S. oreophila* in Alabama was formerly a cow pasture. The cattle were removed and weeds flourished. In the actual seep site, there are a few counting stakes, and management thus far has consisted of clumsily felling one large tree which has been allowed to lie there, its trunk and branches covering pitcher plants! No attempt was even made to block the relatively narrow and crude drainage ditch leading from the seep. The tree could easily have been cut up and removed without excessive trampling damage or bringing heavy truckage into the seep itself. Of course this would have taken some time, thought and sweat.

I certainly concur with this step in preserving *ssp. jonesii* in principle, but it does little good to try and save a species or center attention on it solely without considering preserving and protecting an appropriately sized physiogeographic site, and then properly managing the site. I read too much of people bemoaning "enough is not known to actively manage a site" when in fact enough is known, often by common sense and dead reckoning alone, to at least hold it where it is in its trophic progress if not substantially reverse undesirable changes back toward an optimum condition.

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## Special Book Review

Lowrie, Allen. 1989. Carnivorous plants of Australia—Volume 2. University of Western Australia Press (Nedlands, Western Australia 6009). 202 pp. plus xxxvii.

### Review by Donald Schnell

This is the second of a projected three volume series covering the carnivorous plants of Australia. Volume One dealt with the tuberous droseras, most of which occur in Western Australia. This volume covers all of the pygmy droseras, two non-pygmy, non-tuberous droseras, and finally three more tuberous droseras that had been defined since Volume One.

This series is a major effort on the part of the author, particularly in light of the confusion concerning droseras in Australia. The relatively few species recognized only a few years ago have exploded into many more. The reason for this, at least partially, lies in Australia's unique geography, particularly the central "outback". This is generally harsh, parched ponds. With the intervening large areas of nearly perpetually dry lands, we have a good example of island biology in a way, and the partial isolation of various populations in the islands of seasonal and rare permanent wetness encourages speciation and subspeciation. We have had large numbers of new plants temporarily named according to location found, and now most of this is cleared up through the research efforts of the author and others he acknowledges.

The book is available in both soft and hard cover and features a handsome photo of a pygmy *Drosera* on the cover. The paper is an excellent glaze, printing is sharp and clear, including the many color photos in the volume. After the usual brief prefaces, the book begins with a useful glossary, a type drawing of a typical pygmy *Drosera* with parts labeled, and a listing of the groups, species, and a complete key. A very unique and thoughtful section on the gemmae of these plants follows, which includes a key to the gemmae as well as a shaded illustration of each taxon's gemma. This reviewer had